First 5 California Children and Families Commission
Hard to Reach Populations Research Project

FIRST 5 CALIFORNIA™

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MESSAGE FROM THE DIRECTOR

Identifying Hard to reach Communities in California

First 5 California strives to serve all California children ages 0 to 5 and their families, including those who are hard to reach and those who most need and can benefit from our programs and services. Communication and outreach are powerful tools that allow us to educate parents and caregivers about the importance of brain development, the critical role they play in their children's early years, and the availability of programs designed to serve them.

California is a diverse state. Less than half (48%) of Californian households speak only English at home. We and our 58 First 5 county commissions do an excellent job reaching families who speak English, and have outreach materials in several other languages as well, including Spanish, Korean, Chinese, and Vietnamese. County commissions with local populations of other ethnic cultures also provide outreach in their communities, including Hmong, Mien, Russian and indigenous Mexican communities.

The First 5 California Children and Families Commission is committed to reaching the greatest number of families possible with our important messages on a child's earliest years. To that end, the Commission undertook a research project to identify the hard to reach communities throughout California, including ethnic minorities, isolated communities, and other populations not exposed to mainstream media. ProProse, a social marketing firm, analyzed U.S. Census data, surveyed published news articles and academic literature, and interviewed First 5 county commissions to get an in-depth understanding of these hard to reach communities.

This project furthers the First 5 California Commission's commitment to ensuring that First 5 messages are effectively conveyed to all Californians by helping achieve Strategic Plan Objective 3.2.1:

> *Identify hard to reach populations and appropriate partnerships for sharing information on the healthy development of children 0 to 5.*

The following report includes a comprehensive analysis of the communities of families with children up to age five who speak any of the top 27 non-English languages identified by U.S. Census data, plus American Indians and indigenous Mexican communities. It includes data tables, maps, and a synopsis of findings about these families' cultural traditions, habits, and beliefs. Also included are lists of media in these languages and grassroots cultural organizations.

We are excited to provide this extensive data to help further inform our education and outreach efforts. It will help First 5 California more effectively overcome barriers to providing culturally-appropriate outreach to all California families. We would like to extend our appreciation to the First 5 California Children and Families Commission, especially the Media Review Committee, as well as the First 5 county commissions for their cooperation and support of this project.

Kris Perry
Executive Director, First 5 California

1. EXECUTIVE SUMMARY

In spring 2009, the First 5 California Children and Families Commission undertook a research project to identify hard to reach communities throughout California, such as ethnic minorities, isolated communities, and populations not exposed to mainstream media. This project furthers First 5 California's commitment to ensuring that First 5 messages are effectively conveyed to all Californians by helping achieve Strategic Plan Objective 3.2.1: *Identify hard to reach populations and appropriate partnerships for sharing information on the healthy development of children 0 to 5.* ProProse, a social marketing agency in Sacramento, led the project along with team members from the research firm ConsumerQuest, media buying firm U.S. International Media, and public health research expert Diana Cassady, Dr.P.H.

Definition of Hard to reach Communities

For the purposes of this study, hard to reach communities are defined as: California households in which all members over age 14 speak one of the top 27 languages other than English identified in the U.S. Census Bureau's 2007 American Survey (ACS), are not fluent in English, have children under the age of 6, and are located in a PUMA[1] where at least 20 households speak that language. American Indian and indigenous Mexican populations are also included in this definition, making the total number of hard to reach groups for this project 29.

This project surveyed a wide range of existing research studies about early childhood issues and populations in need. It also identified where these populations reside in California, which ones are hard to reach (either culturally or linguistically isolated), the languages they speak, and the best methods to communicate First 5 California messages in appropriate languages and culturally appropriate ways. This project report provides the following.

Research Methodology

Research for this project included a variety of data-gathering methods to identify the demographic and cultural characteristics of linguistically isolated families with young children in California, as well as any communication vehicles available to reach them. The research methods include:

- **Demographic Data Analysis:**, Maps and data tables were created to show the demographic profiles of the identified hard to reach populations. For the 27 language groups and American Indian populations, the U.S. Census Bureau's 2007 American Community Survey (ACS) was used to show their average income, marital status, and highest level of maternal education. The demographic maps and data table for indigenous Mexican populations was created based on the population estimates provided by a 2007 California Institute of Rural Studies report.
- **Key Informant Interviews:** Interviews were conducted with staff from nine First 5 county commissions to obtain grassroots knowledge and insights about hard to reach communities in select areas of the state.

[1] Public Use Microdata Areas (PUMA) are geographic regions created by the US Census Bureau to include approx. 100,000 people and generally follow city and county boundaries. www.census.gov/acs/www/Products/PUMS/index.htm.

- **Literature Reviews:** A thorough review of cultural traditions, habits, and beliefs of each hard to reach group was conducted based on reports in academic literature and the popular press.
- **Media Analysis:** Based on the ACS data, a media analysis was conducted to identify the in-language paid media outlets that are available to reach these populations throughout the state.
- **Supplemental Research:** Research was performed on Internet accessibility and Web site usage among minority groups in California, in addition to identifying lists of grassroots and community-based resources that serve these populations.

Research Findings

The Research Findings section of this report provides a summary and key findings for each of the research methods used. Following are some of the highlights:

- **Demographic Data Analysis:** In 2007, there were 334,609 linguistically isolated households with children under age 6 who spoke one of the top 27 languages in the state other than English, and another 25,978 American Indian households with children under the age of six.[2] In addition, estimates of the number of indigenous Mexicans in California, range from 100,000 to 150,000.[3]

  Demographic maps showing where hard to reach communities are located can be found in ***Attachment A*** of this report. The data tables showing the number of households, their average income, marital status, and highest level of maternal education for each hard to reach group (except Indigenous Mexican populations) is provided in ***Attachment B*** of this report.
- **Key Informant Interviews:** The interviews revealed a wide range of knowledge and issues regarding hard to reach populations in different areas of the state.
- **Literature Reviews:** The literature search revealed a wide diversity regarding cultural practices and beliefs among hard to reach populations. The complete set of literature reviews and their references are included in ***Attachment C*** of this report.
- **Media Analysis:** Most hard to reach communities in the state have some type of in-language local or regional media outlet available to them. A detailed spreadsheet showing each media outlet and its corresponding hard to reach audience is provided in ***Attachment D*** of this report.
- **Supplemental Research:** The Internet and Web site usage research revealed that information technology is an important and fast-growing resource for ethnic and minority populations in California. The research of grassroots organizations revealed an extensive list of resources and services for hard to reach communities. A spreadsheet containing the grassroots outreach database is included in ***Attachment E*** of this report.

[2] Source: ACS 2007
[3] Estimates of Oaxacan Mexicans in California by the American Institute for Rural Studies 2007. The majority of Indigenous Mexicans in California are from the State of Oaxaca. (Note, totals are for individuals, not households, and not limited to those with children under age 6.

Communication Recommendations

Research revealed several opportunities and lessons for communicating with hard to reach populations. The findings suggest that a multi-faceted approach to outreach should be used in order to be most effective. This includes non-English media (TV, radio, print, online), collaboration with community-based and faith-based organizations, grassroots outreach, and culturally appropriate materials.

2. RESEARCH METHODOLOGY

ProProse and its subcontractor partners utilized the following research methodologies to define and identify hard to reach communities across California for this project.

A. Demographic Data Analysis

Overview

To gather the most current and useful demographic information for this project, a number of different datasets were reviewed, such as the California Health Interview Survey (CHIS) and the California Women's Health Survey. After a thorough assessment, we concluded that only the U.S. Census Bureau's American Community Survey (ACS) included data on a representative sample of Californians who spoke all of the languages of interest for this project. For instance, CHIS is conducted in English, Spanish, and six Asian languages, but does not include speakers of Hebrew, Armenian, or Russian.

The ACS is conducted annually by the U.S. Census Bureau. One percent of households in the U.S. are included in the survey, and respondents are selected based on a complex sampling design intended to reflect the U.S. population and the population of the state. The ACS Web site has more detailed information on the sampling strategy and accuracy of the ACS data: http://www.census.gov/acs/www/Downloads/ACS/accuracy2006.pdf

For the demographic data analysis, "hard to reach" communities were defined as California households in which all members over age 14 speak one of the top 27 languages other than English, are not fluent in English, have children under the age of 6, and are located in a PUMA[4] where at least 20 households speak that language. These languages are: Spanish, Chinese, Vietnamese, Tagalog, Korean, Hmong, Armenian, Persian, Mon-Khmer/Cambodian, other Indic languages, Arabic, Russian, other Pacific Island languages, French, Japanese, other Asian languages, Laotian, Hindi, German, Portuguese/Portuguese Creole, African languages, Urdu, other Indo-European languages, Hebrew, Thai, Guajarati, and Italian.

The top 27 languages were determined using the report *Californians' Use of English and Other Languages: Census 2000 Summary* (Center for Comparative Studies in Race and Ethnicity (CCSRE) Stanford University 2003.[5] The first 27 languages (excluding "Other and unspecified languages") listed in *Table 1: Language Spoken at Home* of the report were chosen because they represent 99.7 percent of households with children ages 5 to 17 and adults ages 18 and older in California that speak a language other than English at home. The Census Bureau collects information on language spoken in the home only for the population 5 years and over because it was determined that the vast majority of children ages 0-4 years did not speak any language.

[4] Public Use Microdata Area. For more information go to http://www.census.gov/acs/www/Products/PUMS/index.htm.
[5] Full 2003 CCSRE report provided in Attachment F.

Table 1: Language Spoken at Home (CCSRE 2003)

	CALIFORNIA				UNITED STATES			
	Age 5-17		Age 18+		Age 5-17		Age 18+	
	Number	%	Number	%	Number	%	Number	%
Speak only English	3,886,749	57.4	15,128,124	61.4	43,316,237	81.6	172,107,320	82.2
Spanish or Spanish Creole	2,188,434	32.3	5,917,071	24.0	6,830,100	12.9	21,270,952	10.2
Chinese	128,999	1.9	686,387	2.8	317,106	0.6	1,705,037	0.8
Vietnamese	83,250	1.2	323,869	1.3	205,064	0.4	804,563	0.4
Tagalog	67,760	1.0	558,639	2.3	127,790	0.2	1,096,451	0.5
Korean	54,244	0.8	243,832	1.0	156,080	0.3	737,983	0.4
Miao, Hmong	33,256	0.5	32,273	0.1	82,653	0.2	85,410	0.04
Armenian	30,762	0.5	124,475	0.5	36,487	0.1	166,221	0.1
Persian	25,484	0.4	128,837	0.5	54,076	0.1	258,009	0.1
Mon-Khmer, Cambodian	24,654	0.4	46,651	0.2	57,939	0.1	123,950	0.1
Other Indic languages	21,686	0.3	90,433	0.4	79,495	0.1	359,794	0.2
Arabic	20,732	0.3	87,608	0.4	124,220	0.2	490,362	0.2
Russian	19,324	0.3	99,058	0.4	117,518	0.2	588,724	0.3
Other Pacific Island languages	18,512	0.3	94,920	0.4	51,251	0.1	262,590	0.1
French (incl. Patois, Cajun)	16,509	0.2	118,558	0.5	232,696	0.4	1,411,142	0.7
Japanese	15,872	0.2	138,761	0.6	55,555	0.1	422,442	0.2
Other Asian languages	12,479	0.2	63,534	0.3	52,732	0.1	345,702	0.2
Laotian	12,426	0.2	28,891	0.1	38,302	0.1	111,001	0.1
Hindi	11,982	0.2	64,152	0.3	41,076	0.1	275,981	0.1
German	11,661	0.2	130,010	0.5	164,961	0.3	1,218,481	0.6
Portuguese or Portuguese Creole	9,932	0.1	68,471	0.3	85,235	0.2	479,395	0.2
African languages	8,461	0.1	37,010	0.2	68,273	0.1	350,232	0.2
Urdu	7,031	0.1	24,557	0.1	61,658	0.1	201,242	0.1
Other Indo-European languages	6,636	0.1	31,114	0.1	55,132	0.1	272,814	0.1
Hebrew	6,385	0.1	28,262	0.1	39,980	0.1	155,394	0.1
Thai	5,797	0.1	34,173	0.1	14,464	0.03	106,000	0.1
Other and unspecified languages	5,765	0.1	29,783	0.1	23,007	0.04	121,568	0.1
Gujarathi	5,637	0.1	27,475	0.1	41,940	0.1	194,048	0.1
Italian	5,431	0.1	78,759	0.3	68,029	0.1	940,341	0.4
Other Slavic languages	5,294	0.1	23,402	0.1	37,409	0.1	263,670	0.1
Polish	2,811	0.04	20,624	0.1	75,678	0.1	591,736	0.3
Serbo-Croatian	2,796	0.04	21,076	0.1	41,370	0.1	192,495	0.1
Scandinavian languages	2,437	0.04	26,216	0.1	15,405	0.03	146,847	0.1
Greek	2,385	0.04	26,462	0.1	38,511	0.1	326,925	0.2
Other West Germanic languages	1,597	0.02	29,199	0.1	46,522	0.1	204,613	0.1
Hungarian	1,328	0.02	17,903	0.1	7,642	0.01	110,331	0.1
Other Native North American languages	865	0.01	5,864	0.02	39,989	0.1	163,477	0.1
French Creole	594	0.01	3,513	0.01	112,621	0.2	340,747	0.2
Yiddish	341	0.01	8,611	0.03	39,244	0.1	139,701	0.1
Navajo	146	0.002	1,628	0.01	42,556	0.1	135,458	0.1
N	*6,766,444*		*24,650,185*		*53,096,003*		*209,279,149*	

Source: Census 2000 (SF3)

In addition, American Indians and indigenous immigrants from Mexico were included as hard to reach populations because of their unique geographic, linguistic, and cultural isolation. Because American Indian populations are identified as a cultural or ethnic group for this project, the demographic analysis for this group identifies all American Indian households with children under the age of six, and does not distinguish them by linguistic isolation. As for indigenous Mexican communities, the ACS does not gather specific data on the languages in this group, so a different methodology was utilized. The 2007 California Institute of Rural Studies (CIRS) report Indigenous Oaxacan Communities in California: An Overview was determined as the best possible source.6 While this report only focuses on immigrants from the state of Oaxaca, most studies indicate that the largest number of indigenous Mexican immigrants (including Zapotec, Mixteco, and Triqui) in California are from this region, so these estimates cover the majority of the population of interest. The Mexican state of Oaxaca is home to 17 indigenous groups, each with a distinct cultural and linguistic heritage. Limited Spanish skills and lack of written indigenous languages are some of the most significant barriers to outreach among this population. The CIRS report authors estimated the population using a variety of sources, including the U.S. Census, a national survey of agricultural workers, research published by others, and interviews with indigenous community leaders throughout California.

Therefore, a total of 29 linguistic or cultural groups comprise the hard to reach populations for the demographic data component of this report.

Data Tables

Using the 2007 ACS, data tables were created to show the number of hard to reach households, their average income, marital status, and highest level of maternal education. Twenty-eight data tables – one for each linguistic group and one for American Indian populations – are presented with results for each county as well as totals by group for the entire state. As stated above, because of the inability of the ACS to estimate population numbers of indigenous Mexican households, this group is not included in the data tables.

Several steps were taken to prepare the ACS 2007 California datasets for analysis. First, data filters were used to identify only households in California that were occupied and not classified as group housing. The resulting data file had 125,881 households representing 12,200,679 households statewide. A second round of filters was created to further refine households in the dataset to show only variables of interest (e.g., language spoken at home, linguistic isolation, children under age six at home) at the household level (e.g., total household income) and the individual level (e.g., maternal education). Table 1 on the following page provides a detailed explanation of each variable used for the data tables.

[6] Full 2007 CIRS report is provided in Attachment F.

Table 1. ACS 2007 Variables used in Data Tables

Study Variables	*ACS 2007 Variable Name*	*Explanation/Notes*
Children under age six at home	*HUPAOC*	*This variable indicates whether the household has one or more of the head of household's "own children at home" under the age of six. Note that the ACS variable only provides children's ages in broad categories: the household is classified as having children under six, six to 17, both, or neither. The research team recoded HUPAOC into a dichotomous variable (yes/no) using "children under six" and "both" as "yes."*
Linguistically isolated	*LNGI*	*This variable is created by the U.S. Census Bureau, and means that no one in the household over age 14 speaks English "well."*
Language spoken at home	*LANP*	*The ACS has approximately 250 codes for various languages. The head of household's answer was used to classify the household (REL=0). Languages used in this analysis are self explanatory except for the following:* • *Other Pacific Island languages: Balinese, Cham, Javanese , Madurese, Malagasy , Minangkabau, Sundanese, Pangasinan, Bikol , Pampangan, Gorontalo, Micronesian, Carolinian, Gilbertese, Kusaiean, Marshallese , Mokilese, Mortlockese, Nauruan, Palau, Ponapean, Trukese, Ulithean, Woleai-Ulithi, Yapese, Melanesian, Polynesian, Niuean, Tokelauan, Fijian, Marquesan, Rarotongan, Maori, Nukuoro* • *Other Asian languages: Chuvash, Karakalpak, Kazakh, Kirghiz, Karachay, Uighur, Azerabaijani, Turkmen, Yakut, Mongolian, Tungus, Dravidian, Brahui, Gondi, Kurukh, Munda, Burushaski, Hakka, Kan, Hsiang, Fuchow , Wu, Tibetan, Karen, Kachin, Paleo-siberian, Muong, Buginese , Moluccan, Achinese* • *Other Indo-European languages: Krio, Hawaiian Pidgin, Pidgin, Gullah, Saramacca, Frisian, Icelandic, Faroese, Catalonian, Rhaeto-omanic, Welsh, Breton, Scottic Gaelic, Kashubian, Lusatian, Slovene, Balochi, Tadzhik, Ossete, Bihari, Rajasthani, Oriya, Assamese, Kashmiri, Sindhi, Romany* • *Other Indic languages: Indian – not specified, Bengali, Panjabi, Mathi, Pakistan not-specified, Tamil.* • *Other African languages: Swahili, Bantu, Mande, Fulani, Kru/Ibo/Yoruba, African.*
American Indian	*RACAIAN*	*A standard Census question asking if the respondent has any American Indian ancestry. The head of household's answer was used to classify the household.*

Household Income	*HINCP*	*Total annual household income from all sources, including salary, government assistance, alimony, etc.*
Maternal Educational Level	*SCHOOL*	*Highest level of education completed by the mother of the household. This is a categorical variable where several grades are combined. If a mother was not present, the household was not counted.*
Marital Status	*HHT*	*"Household type" was recoded to estimate the number of households with both parents, single fathers, and single mothers.*
Public Use Microdata Area (PUMA)	*PUMA*	*Public Use Microdata Areas (PUMAs) are geographic regions created by the U.S. Census Bureau to include approximately 100,000 people and to generally follow city and county boundaries. California has 235 PUMAs. The large population ensures that respondents are not likely to be identified by users of this dataset. PUMA maps of P can be found at: http://www.census.gov/geo/www/maps/puma5pct.htm.*
Household Weight	*WGTP*	*The number of households for each PUMA.*
County	*****	*Created for this study based on PUMA codes provided by the U.S. Census Bureau.*

Next, the statistical software package *Stata version 10* was used along with survey commands to formulate the dataset into counts and averages. As a result, the household weight (WCTP) was factored into the calculations to determine the number of households for each language group. Therefore, the number of households identified in the Data Tables reflect weighted data, and are estimates, not exact counts.

The final dataset was then organized into spreadsheets for each of the hard to reach populations, which show the number of households with children under age six in each county, as well as the mean household income, marital status, and mother's education level.

Maps

Maps were created for this report for each hard to reach group. The maps for the language groups and American Indian households were based on data from the 2007 ACS, and the maps for indigenous Mexican populations were based on the 2007 CIRS report. They visually depict the number and location of each hard to reach community throughout the state.

The ACS data maps are categorized regionally (following the six First 5 California Regions) and are subdivided by PUMA. Only PUMAs with more than 20 households where adult residents primarily speak any of the selected 27 languages for this report were mapped. Color codes depicting the number of households for each language are used, with different colors used to represent density, based on the following scale:

- Missing or Excluded (includes: state and national parks)
- 19.99 or fewer
- 20.00 – 250.00
- 250.01 – 500.00
- 500.01 – 1000.00
- 1000.01+

Maps were not created for regions with less than 20 households in all PUMAs for a particular language (or when data was missing or excluded by the U.S. Census). For example, in the Northwest region, there are maps for Spanish speakers and American Indians. But there are no maps for Thai, Chinese, or Armenian speakers since none of these groups live in the Northwest region. In contrast, there are 74 maps for the Southern region because of the number of languages spoken and large populations of many of these groups.

The indigenous Oaxacan Mexican population maps were created according to the six regions used in the CIRS report (not First 5 California Regions). These regions include the Central Valley, Los Angeles County, San Diego County, Ventura County, and the Central Coast. For each region, the report provides population estimates by county, so unlike the ACS maps, the maps are subdivided by county rather than by PUMA.

For each county identified by the CIRS report, the indigenous Mexican population data from the 2000 U.S. Census is provided. The report also presents estimated population ranges for some counties based on the additional quantitative information gathered from various sources such as academic literature on Oaxacans in California, and key informant interviews. When an estimated population range was presented, the lower, more conservative number was selected for the indigenous Oaxacan Mexican maps. In cases where no additional population estimates were available, the population size identified by the U.S. Census was used. To illustrate the various population densities found, the maps use the following scale:

- Missing or Excluded (includes: state and national parks)
- 1,000 or fewer
- 1,001 – 3,000
- 3,001 – 10,000
- 10,0001 – 25,000
- 25,001 – 50,000
- 50,000+

In addition to showing the population size by county, the indigenous Oaxacan Mexican maps include the primary languages that comprise that population (e.g. Mixteco, Triqui, Zapoteco, etc.), and the principal communities or cities where they live.

B. Key Informant Interviews

To help inform the Literature Review component of the project, ProProse conducted Key Informant Interviews with select First 5 county commissions to gather more grassroots information about populations in certain areas of the state. The First 5 California Communications Team identified the following nine First 5 county commissions for interviews:

- Los Angeles
- San Diego
- Fresno
- Kern
- Sacramento
- Monterey
- Butte
- Santa Barbara
- Humboldt

Following are the questions ProProse used to initiate dialogue regarding local hard to reach populations with county commission interviewees:

1. What are the different hard to reach populations that reside in your county?
2. Where are these populations located?
3. Do you have a funded partner that serves any of the populations identified?
4. Have you included any of these communities in your outreach or communications? If so, how successful have you been and what obstacles if any have you encountered?
5. Are there any known communication mediums reaching the identified populations?
6. Are there local advocates (religious or cultural centers) serving these populations?
7. Are there any special considerations we should be aware of regarding the identified populations?
8. Are there possible populations in your county that you are unaware of?

C. Literature Reviews

A thorough review of existing publicly available research reports, published articles, and other available literature was compiled in order to augment understanding of the cultural practices and beliefs of the 29 populations (27 languages and two cultural groups) for this project. Google Scholar was used as the search engine of choice for the academic literature because it includes research from anthropology, sociology, social welfare, public health, etc. The proprietary LexisNexis search engine was also used to search its database of hundreds of U.S. newspapers and magazines for relevant articles. Following are the search strategies used to obtain relevant information:

- Limiting the literature publish dates from 1990 – present.
- Using the following terms alone and in combination: [language/cultural group], immigrants, U.S., American, child rearing, health, media, and communication.

Following are the categories of issues that were examined for each Literature Review:

- Cultural practices, taboos, or behaviors that affect the physical or psychological health and educational preparedness of young children and young mothers.
- Implications of geographic isolation (including access to prenatal and pediatric healthcare, early childhood education resources, etc.).
- Best practice reports or case studies about communicating with and/or educating populations identified in any of the Census data.
- Typical health issues affecting culturally or linguistically isolated young children in California.
- Existing media, influencers, or other communication channels or practices in use to reach any of the identified populations.

In a small number of cases, these searches were unproductive. For instance, using language groups such as “Other Indic languages” did not reveal any entries in either search engine. As a result, no literature reviews were written for the five “Other language” groups. For speakers of Italian, Portuguese, and German, there was very little information on recent immigrants; and for this reason the reviews for these groups are brief.

Most literature reviews cover a single group (such as speakers of Vietnamese, Persian, etc.) but some cover multiple groups of immigrants because of shared cultural or religious practices and the lack of literature on any one group (e.g., Laotian and Cambodian; Mixteco, Zapotec, and Triqui).

After excluding the five “Other language” groups and combining groups because of shared cultural or religious practices (Hindi, Urdu, and Gujarathi were combined, and Laotian and Cambodian were also combined), a total of 21 literature reviews were developed for the project.

D. Media Analysis

ProProse and its subcontractor U.S. International Media performed a media analysis based on the ACS demographic data analysis. This media analysis identified the in-language media outlets existing throughout the state that can be accessed by the hard to reach populations. Following is the methodology that was used.

Media Outlet Research

Based on the information provided in the Census data demographic maps and data tables, in-language media outlets were researched for each hard to reach population relative to where that population resides in the state. This research was conducted using a variety of syndicated media research tools, including:

- Strata Marketing Guide
- Standard Rate and Data Service (SRDS) Media Solutions
- SnapShots Market Profile
- Radio Locator
- Arbitron
- Nielsen

Data Table of Media Outlets by Language

In-language media vendors do not exist for all of the 29 populations identified for the project, so in-depth analyses of the media outlet type (print, radio, TV, online, etc.) and its reach were performed only for the languages and ethnic groups for which media outlets were found. Four data tables were compiled, with single sheets for all the identified hard to reach languages (excluding Spanish); and separate sheets for Spanish, American Indian, and indigenous Mexican media.

The data table for the hard to reach languages (excluding Spanish) was organized by each language and the county(ies) that were found to contain linguistically isolated families with children under the age of 6. Any media found to reach a language in the identified county was listed. Where media was not found for languages in specific county locations, the field was left empty in the table.

The Spanish-language media spreadsheet lists the major Spanish-language television, radio, and print media outlets available in each of California's Designated Market Areas (DMAs).[7] Since American Indian and indigenous Mexican-specific media are more scarce throughout the state, a third data sheet was created showing only the media outlets and locations that do exist.

[7] A map showing all of California's DMAs is located in Attachment F.

E. Supplemental Research

Internet Usage and Access

Online media resources and consumption patterns of the target audiences were also researched. A review of the Public Policy Institute of California (PPIC) 2009 study *Californians & Information Technology* was conducted to gather data on ethnic minority access and use of Internet technology in California. The New America Media report *A National Study on the Penetration of Ethnic Media in America* was also reviewed to obtain information on the prevalence of ethnic media usage in the United States.

Web site Usage Patterns

Data on traffic to the First 5 California Web site revealed that most visitors are Latino, followed by Caucasian. Asian women are the third largest group. To identify other online sites that are highly visited by Latino and Asian women, further research was conducted using Nielsen AdRelevance – an online advertising research service – to create a spreadsheet showing the highest indexing Web sites (on a national level) for these groups.

Grassroots Communication Database

To identify community-based, faith-based, and other potential outreach organizations that serve these hard to reach populations, grassroots communication outreach research was performed. Organizations were researched and identified through Internet Google searches, interviews with First 5 county commissions, and referrals from known community organizations. For the 27 Census data groups (excluding Spanish), plus American Indian communities and indigenous Mexican communities, a spreadsheet was created to show the following information:

- County(ies) served
- Name of the organization
- Identifying information (Web site, address, phone number, and email -- when available)

3. RESEARCH FINDINGS

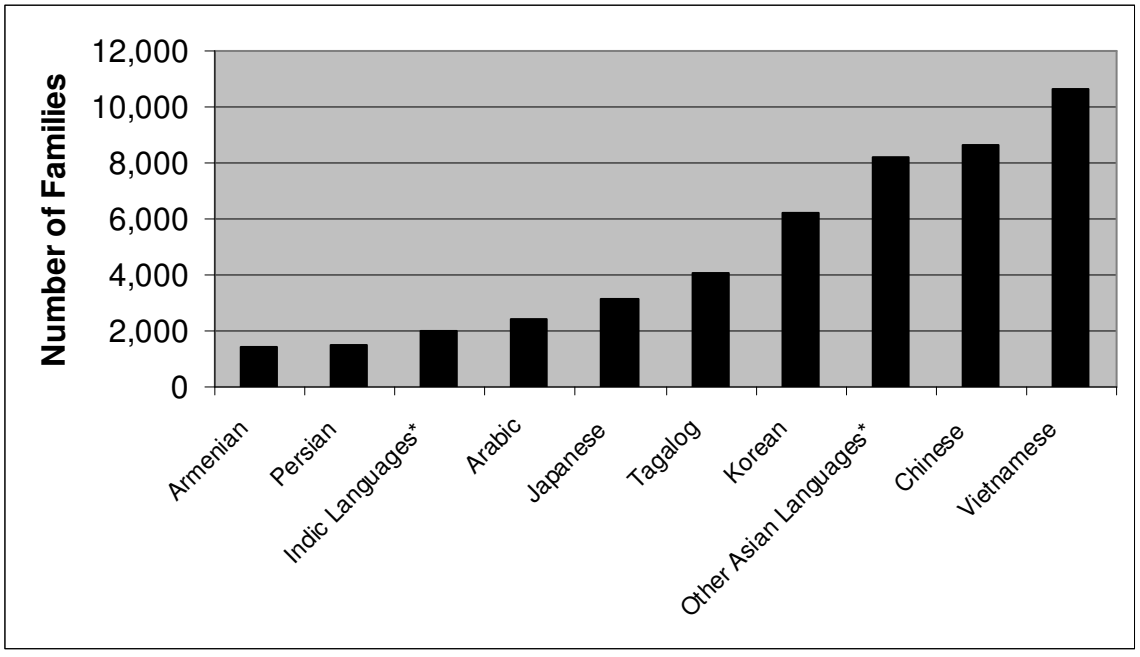
A. Demographic Data Analysis - Maps and Data Tables

Overview

Census data and other demographic research revealed that in 2007 there were 349,446 families who were linguistically isolated and spoke one of the top 27 languages in California. By far the largest number consisted of Spanish speakers. About 84 percent (291,590) of the linguistically isolated families with young children identified by the 2007 ACS were Spanish speakers. The remaining 57,856 identified linguistically isolated families spoke a language other than Spanish. Vietnamese-speaking households were the next largest identified group after Spanish speakers, totaling 10,667. The smallest group was 109 German-speaking households. Figure 1 shows the number of linguistically isolated families with young children for the top 10 languages spoken, not including Spanish and excluding indigenous Mexican immigrants.

Figure 1. Number of Linguistically Isolated Families with Children Under 6:

Top 10 Languages (Excluding Spanish and Indigenous Mexican), California, 2007



* Indic languages: Indian – not specified, Bengali, Punjabi, Mathi, Pakistan not-specified, Tamil.

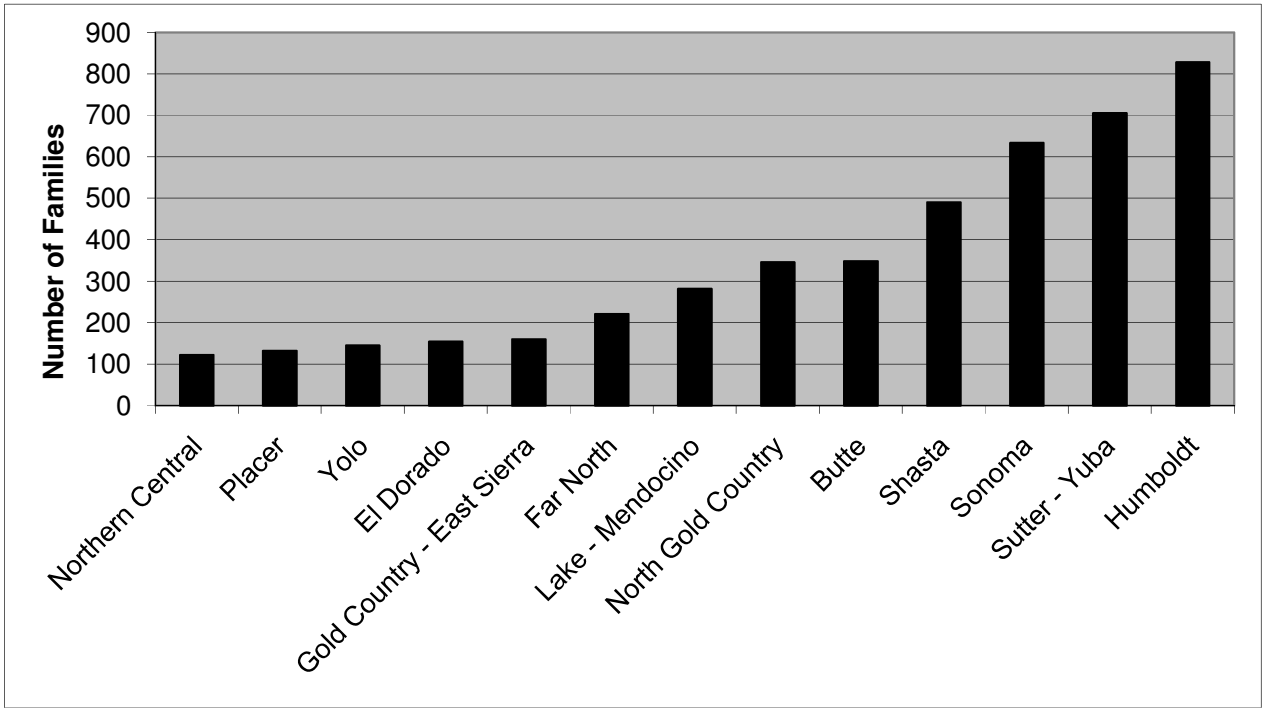
*Other Asian languages: Chuvash, Karakalpak, Kazakh, Kirghiz, Karachay, Uighur, Azerabaijani, Turkmen, Yakut, Mongolian, Tungus, Dravidian, Brahui, Gondi, Kurukh, Munda, Burushaski, Hakka, Kan, Hsiang, Fuchow, Wu, Tibetan, Karen, Kachin, Paleo-siberian, Muong, Buginese, Moluccan, Achinese.

American Indian Households

California has a large population of American Indians who, though most speak English, may be hard to reach because of geographic and cultural isolation. In 2007 there were 25,978 families in California who reported having American Indian ancestry and who had children under the age of 6. Large urban counties had the largest population of American Indian families with young children. Los Angeles County, for example, is home to the largest number of these families (4,718), followed by San Diego (2,252), San Bernardino (2,028), Orange (1,693), and Riverside (1,446). About half (46.7%) of all American Indian families with young children live in these five counties.

Almost one out of five American Indian families with young children lives in rural northern California counties (4,564 families, or 17.6%). Figure 2 shows the number of rural families by county, from a low of 122 in Colusa and surrounding counties to a high of 828 in Humboldt County.

Figure 2. American Indian Families with Children Under 6 in Rural Northern California Counties, 2007



* **Note:** Several counties are combined due to small populations size:

- **North Central** includes Colusa, Glen, Tehama, and Trinity counties.
- **Gold Country-East Sierra** includes Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne counties.
- **Far North** includes Del Norte, Lassen, Modoc, and Siskiyou counties.
- **Lake - Mendocino** includes Lake and Mendocino counties.
- **North Gold Country** includes Nevada, Sierra, and Plumas counties.
- **Sutter - Yuba** includes Sutter and Yuba counties.

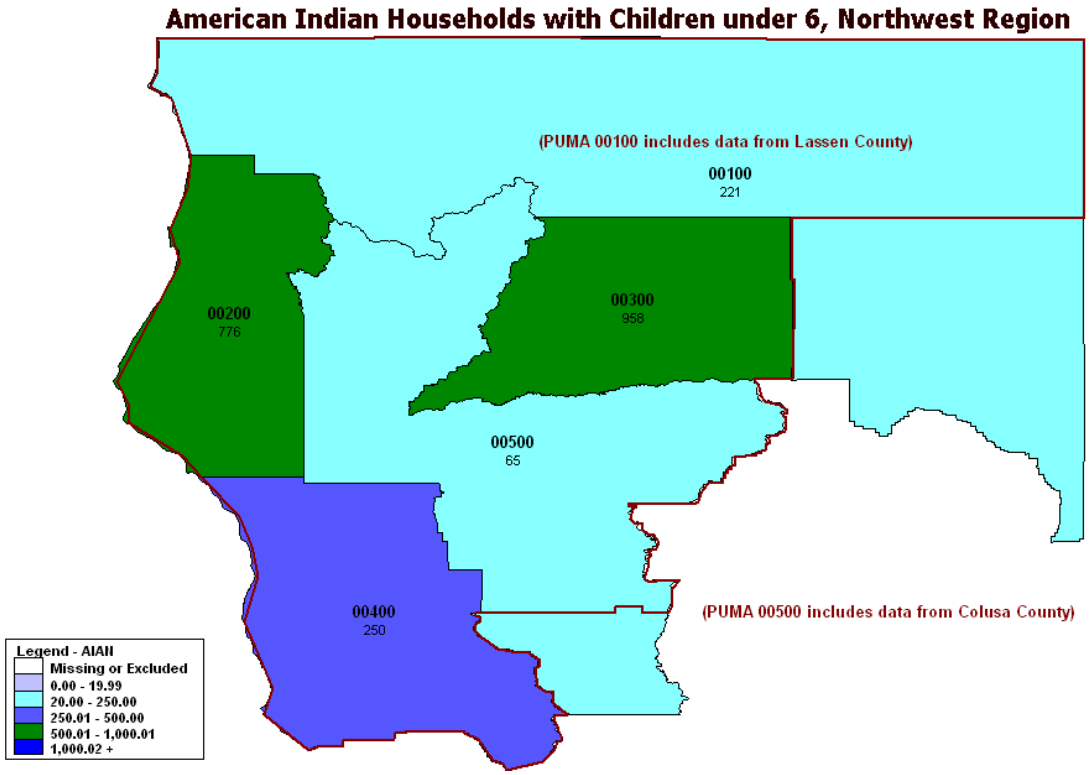
Indigenous Mexicans

Indigenous immigrants from Mexico are another linguistically and culturally isolated group in California. Many of these families speak Mixtec, Zapotec, Triqui, Mayan, and other indigenous languages from southern Mexico. However, the ACS does not ask about these specific languages, and so only counts respondents who report Mexico as their country of birth *and* identify themselves as American Indian. There is broad agreement among researchers that the Census and ACS significantly underestimates the number of indigenous Mexican immigrants in the U.S. (Kresge, 2007 and Fox & Rivera Salgado, 2004). Therefore, estimates from researchers and advocates were used to estimate the number of indigenous Mexican people who currently reside in California. According to sources, approximately 45,000 to 55,000 Mixtecs were working in agriculture in California's Central Valley by the early 1990s, and 50,000 to 60,000 Zapotecs had settled in Los Angeles, mainly in the central neighborhoods of Koreatown, Pico-Union, and South-Central (Fox & Rivera-Salgado, 2004). By 2007, the total population of indigenous Oaxacan groups is estimated to be between 100,000 and 150,000 in California (Kresge, 2007).

Maps

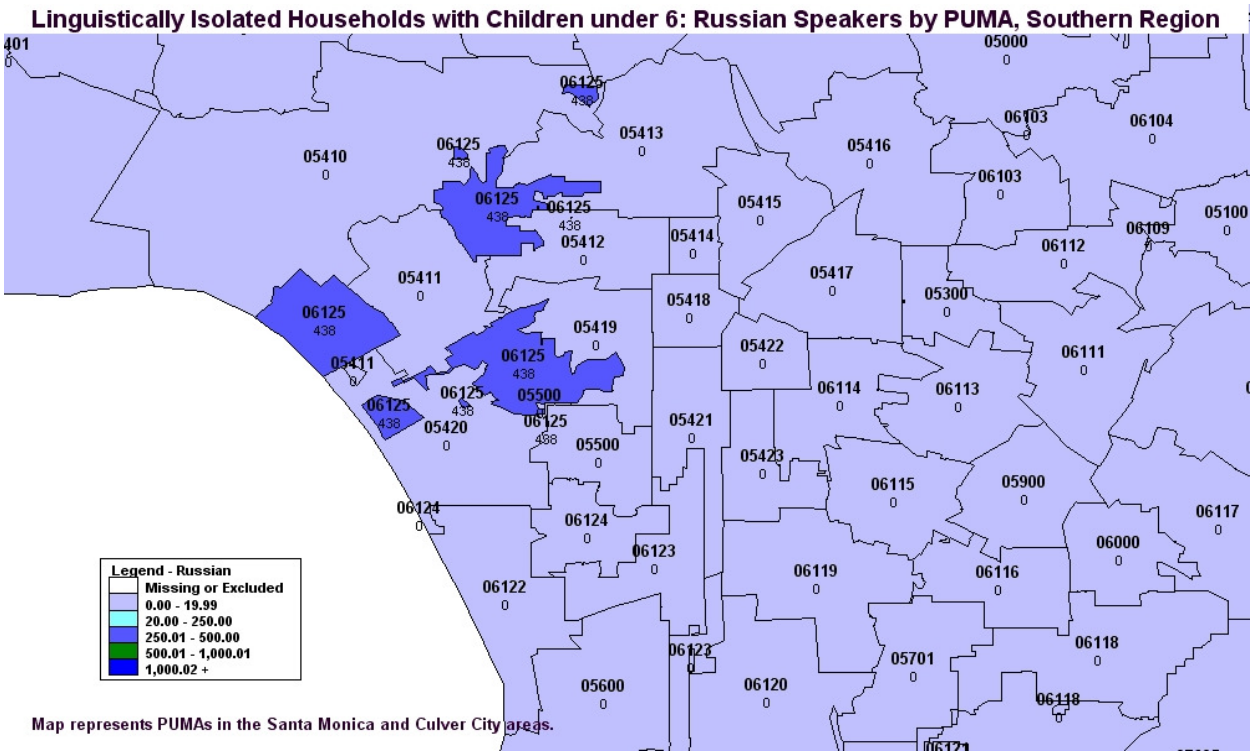
The collection of ACS data maps for each of the First 5 geographic regions, and smaller areas within those regions, are included in Attachment A. These maps are effective at pinpointing where hard to reach communities reside. For instance, in the Northwest region, the map shows that most American Indian families with young children live in two smaller areas along the coast and directly east (Figure 4). Of the 2,270 families in the region, 1,734 (76%) live in these two areas.

Figure 4. Sample Map of the First 5 Northwest Region:



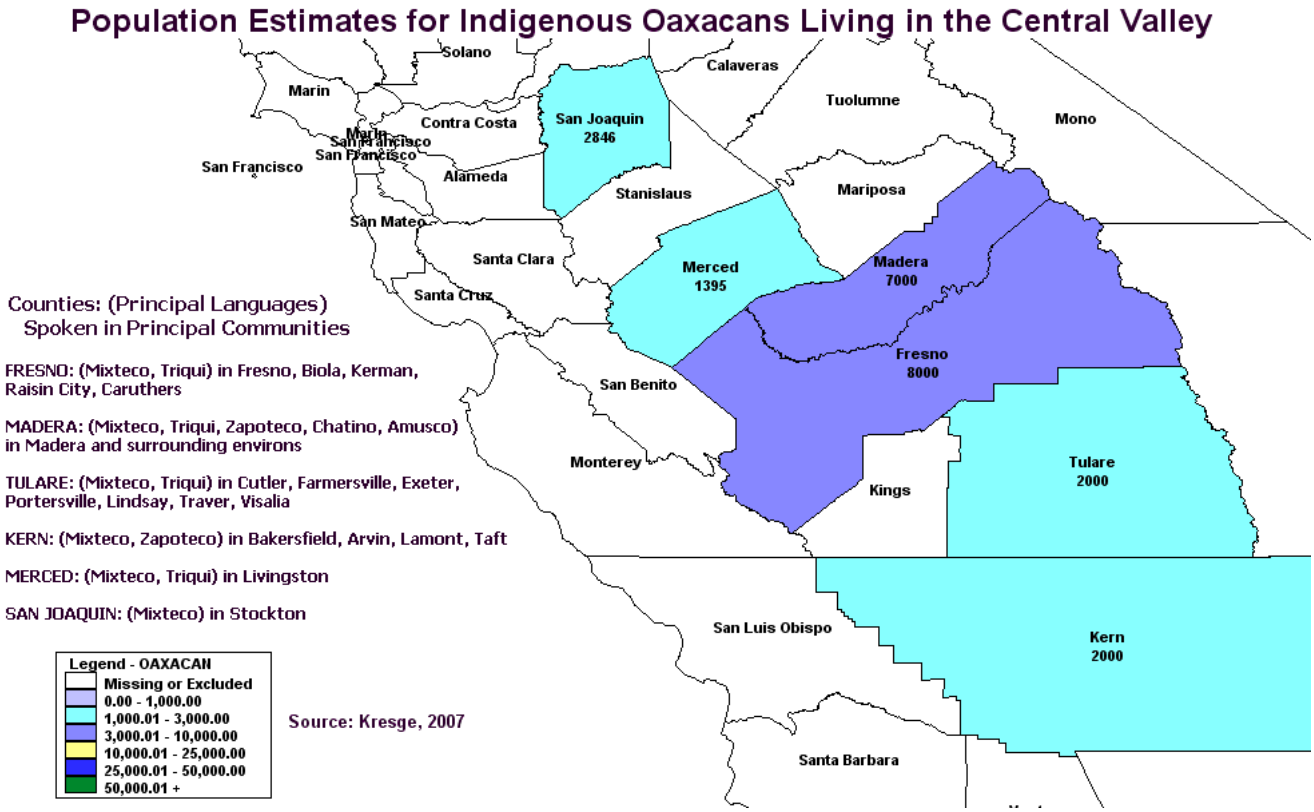
Since the maps show populations by PUMAs, they are equally effective in showing the clustering of hard to reach groups in highly populated areas. For instance in the Southern region, Russian speakers live primarily in the Santa Monica and Culver City areas of Los Angeles County (Figure 5).

Figure 5. Sample Map of Russian Speakers in the First 5 Southern Region:



The indigenous Oaxacan Mexican maps are also provided in Attachment A. These maps are effective to use as a guide for estimating the population size and density of the various linguistic and ethnic groups that comprise the indigenous Mexican population. Based on estimations, the largest concentration of Oaxacans is found in the Central Valley, followed by Los Angeles County, San Diego County, Ventura County, the Central Coast (including the Santa Maria and Salinas Valleys) and a small area north of San Francisco. The information on principal communities within each county where the populations are found is also very useful for potential local outreach.

Figure 6. Sample Map of Indigenous Oaxacan Mexican Groups in the Central Valley:



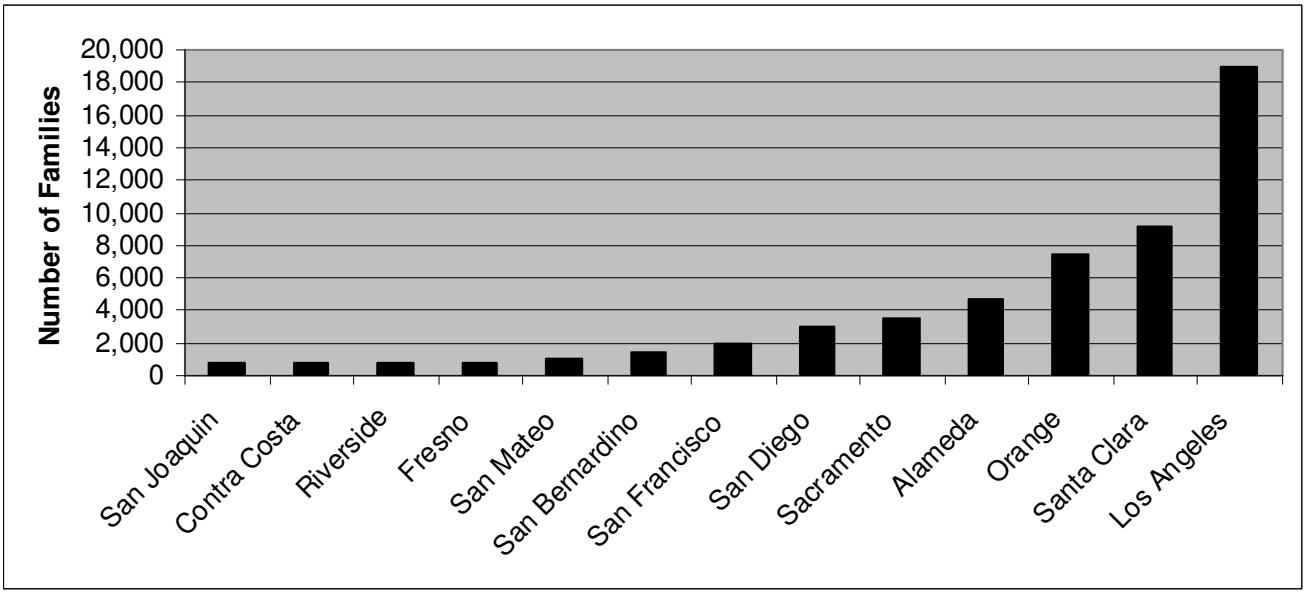
In total, 172 maps were created based on the identified data and sources to show the PUMAs and counties in California that contain all the hard to reach populations for this report. In summary, these maps provide a valuable reference for communication planners to direct their campaigns to specific locations. (See Attachment A for the complete set of maps.)

Data Tables

As stated in the research methodology, demographic data tables for each hard to reach population provide detailed statistics on each isolated community by county. All counties but Shasta had at least 50 linguistically isolated Spanish-speaking families with young children. The number ranged from 55 families in Alpine and surrounding counties to 93,463 families in Los Angeles County.

Focusing on linguistically isolated families who speak a language other than Spanish, 13 counties in Southern California, the Central Valley, and the Bay area were home to 500 or more hard to reach families each (Figure 3). Almost half of the counties in California have no families that are linguistically isolated and speak a language other than Spanish. These counties include: Shasta, Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, Tuolumne, Del Norte, Lassen, Modoc, Siskiyou, Humboldt, Nevada, Sierra, Plumas, Marin, San Luis Obispo, Lake, Mendocino, Colusa, Glen, Tehama, Trinity, Napa, Madera, Ventura, and Tulare (these counties include indigenous Mexican immigrants).

Figure 3. California Counties with more than 500 Linguistically Isolated Families, Excluding Spanish Speakers and indigenous Mexicans, 2007



The complete set of data tables for each language is provided in Attachment B.

B. Key Informant Interviews

Key Informant Interviews with select First 5 county commissions captured additional information about hard to reach populations that may have been missed by other research. County interviews yielded a range of details on hard to reach populations, their locations, and potential insights for reaching them. Following are the findings per county.[8]

Los Angeles

The hard to reach populations, potential insights for reaching them, and their locations identified in Los Angeles County include:

- Mixteco: The indigenous Mexican Mixteco communities are located primarily in central Los Angeles County, downtown Los Angeles, and the Pico-Union neighborhood of Los Angeles.
- Hmong: The Hmong community is centralized in the Long Beach area.
- Antelope Valley: This area is geographically isolated and its inhabitants don't see themselves as connected to Los Angeles.

First 5 Los Angeles shared that they find helpful information on community resources from healthycity.org, a Web site for demographic, economic, and health data in Los Angeles County. They also noted that the Asian Pacific Islander (API) Data Center is a resource for API demographic information in Los Angeles County.

San Diego

The hard to reach populations, potential insights for reaching them, and their locations identified in San Diego County include:

- Filipino: The Filipino population was identified as being located in south San Diego County and National City.
- Rural Communities: The city of Alpine and the Palomar Mountain community were identified as isolated and hard to reach.
- Military Families: The families on Navy and Coast Guard bases in San Diego were identified as hard to reach. Since the military provides services to these families, they do not access outside services and are not included in this report.
- Mandarin Chinese: A Mandarin Chinese community exists in the El Cajon area.
- Somali: A Somali community is located in central San Diego.
- Middle Eastern: First 5 San Diego shared that the second largest Middle Eastern community in the U.S. is located in El Cajon.

[8] While First 5 Mendocino was not included in the initial set of Key Informant Interviews, staff provided information of note regarding American Indian populations in Mendocino county for this project. It was reported that Mendocino county has a significant American Indian community that includes 14 federally recognized tribes. The county's American Indian birth rate is 8% (85-100 infants/year). The health and wellness rates for this population in Mendocino county is below all other ethnic groups.

First 5 San Diego also shared best practices for reaching the Latino populations. They have targeted Spanish language media on TV and radio, as well as at bus shelters and malls.

First 5 San Diego also reported that the API population is well integrated in the county, predominantly bilingual, and consumes English language media.

Fresno

The hard to reach populations and their locations identified in Fresno County include:

- Hmong: The Fresno and Clovis areas have the largest Hmong population in the state. They have a total of 18 clans, with the Vang clan as the largest in the county. First 5 Fresno produces outreach materials in Hmong, but recognizes that oral communication is the best way to reach this community. The in-language radio station 1210 KQEQ is the most effective medium for reaching the Hmong population in Fresno, and 900 AM KBIF is another station that reaches Hmong from Merced to Visalia.
- Cambodian and Laotian: There are substantial Cambodian and Laotian communities in the Fresno and Clovis areas.
- Mixteco: First 5 Fresno has programs to reach Mixteco communities throughout the county. A First 5 Fresno commissioner is a founder of Mixteco radio station Radio Bilingue, so First 5 messages are run on the station for free.
- Russian: A small but growing Russian population was reported. First 5 Fresno has a Slavic Kids program for reaching this community.
- American Indian: First 5 Fresno has tried to reach out to American Indian communities on reservations in Fresno County, but has found it difficult to effectively connect with them. They have worked with the Bureau of Indian Affairs in the past.
- Latino Migrant Workers: This community is spread out in rural areas in Fresno County. First 5 Fresno believes that Spanish language radio and television is reaching this population.
- Asian Indian: First 5 Fresno commented that there are many vineyards being bought by Indian families in the county, but the community is not believed to be centralized. They also stated that the cultural norms for this community do not encourage families to seek services.

Kern

The hard to reach populations, potential insights for reaching them, and their locations identified in Kern County include:

- Asian Pacific Islander: It was noted that various Asian Pacific Islander populations are a small but growing community in Kern County.
- Isolated areas: Isolated areas of the county were identified as hard to reach geographically. This includes Mojave, Ridgecrest, McFarland, Lost Hills, and Maricopa.

- Latino: First 5 Kern noted that 60% of the county's population is Latino. This group has shifted from migrant workers to a more permanent population, and widely consumes Univision and Telemundo Spanish-language television media.

Sacramento

The hard to reach populations, potential insights for reaching them, and their locations identified in Sacramento County include:

- Hmong: The Hmong population was identified as relatively new to Sacramento County and challenging to reach. This population is located primarily in the Meadowview and the Del Paso Heights neighborhoods of Sacramento. The Hmong Women's Heritage Center in Meadowview provides the best outreach to the Hmong community in the Sacramento region.
- Russian: It was noted that the Russian community is located primarily in the Del Paso Heights and East Sacramento neighborhoods of Sacramento. Additional communities are located in Rancho Cordova and West Sacramento (which is a neighboring community in Yolo County). The Slavic Assistance Center and Russian Chamber of Commerce are also effective for outreach to this community.
- Asian Pacific Islander: API communities such as Vietnamese, Cambodian, and Minh, are primarily located in South Sacramento. First 5 Sacramento noted that this population can be reached with messages, but lack of transportation makes it difficult for them to access services.

First 5 Sacramento shared that they produce print materials in Spanish, Hmong, and Russian whenever possible. It was noted though that many Hmong families rely on oral communication more than written communication, so radio and TV are more effective mediums for this population. For the Russian community, First 5 Sacramento reported successfully reaching them through the Russian American Media print publication, Anon.

Monterey

The hard to reach populations and their locations identified in Monterey County include:

- Indigenous Mexican: First 5 Monterey reported several significant indigenous Mexican communities in the county, including:
    - Mixteco: The Mixteco population is mostly centralized in Greenfield and Kings City.
    - Triqui: The primary Triqui community is located in Greenfield.
    - Zapotec: Most Zapotec families are found in Seaside and the Monterey peninsula.
- Korean: First 5 Monterey identified Korean communities in Marina, Seaside, and Salinas.
- Asian Indian/Pakistani: Several grocery stores in the Seaside and Marina areas are owned by Indian and Pakistani families.
- Latino Migrant Workers: Migrant Latino populations in Monterey County were reported to be located primarily in Seaside and the Salinas Valley.

Butte

The hard to reach populations, potential insights for reaching them, and their locations identified in Butte County included:

- Hmong: The Hmong population in Butte County is located primarily in Oroville and Chico. But it was also noted that there are significant populations of Hmong in Yuba City (Sutter County) and Marysville (Yuba County). First 5 Butte relies on relationships with social workers for outreach and contact with Hmong community leaders.
- Latino Migrant Workers: There is a significant community of Latino migrant workers in Gridley. First 5 Butte is focused on this population for the Healthy Families America program outreach.
- Isolated Communities: The mountain community of Berry Creek was identified as hard to reach geographically, but First 5 Butte has been able to communicate messages at the preschool, gas station, and grocery store. They also post ads along the highway that connects Berry Creek to Oroville.

Santa Barbara

The hard to reach populations, potential insights for reaching them, and their locations identified in Santa Barbara County included:

- Mixteco: First 5 Santa Barbara estimates that there are approximately 20,000 Mixteco in the Santa Maria Valley. Very few Mixteco are proficient in English or Spanish. This population has two primary dialects, Mixteca Alt and Mixteca Baja. Neither dialect has a written language, but there are groups trying to create a phonetically written language. Best practices for reaching the Mixteco population include:
    - Implementing a universal home visiting program.
    - Designating a person specifically focused on grassroots outreach and communication to the community.
    - Partnering with Radio Bilingue in Santa Maria to include First 5 messages in the Sunday Mixteco program. (Due to this successful partnership model, the Santa Barbara County Health Department initiated a partnership with First 5 Santa Barbara County for public health outreach to indigenous Mexican populations.)
- Triqui: This is another indigenous Mexican population that is emerging in the Santa Maria Valley.
- Latino: The Latino communities in the northern and southern areas of Santa Barbara County were identified as culturally and socially isolated due to poverty and lack of education.

First 5 Santa Barbara also shared that they reach almost all the populations in the county through radio media. They do this through public/private partnerships that help underwrite the costs of paid media.

Humboldt

The hard to reach populations, potential insights for reaching them and their locations that were identified in Humboldt County include:

- American Indian: First 5 Humboldt reported that there are nine different tribes in the county. These include the Hoopa, Yurok, Chilula, Wiyot, Whilkut, Mattole, Nongatl, Sinkiyone and Lassik. The largest tribe is the Hoopa. Their reservation is located on their original land, so they take their sovereignty very seriously. The tribe's Web site is http://www.hoopa-nsn.gov (which is a potentially important avenue to communicate with this population.) First 5 Humboldt reaches the American Indian community through:
    - School Readiness program on the Hoopa Valley Tribe reservation. (First 5 Humboldt is using this program as a model for potential outreach to other tribes in the county.)
    - American Indian health and wellness service called Potawot Health Village.
- Latino: The Latino population was identified as relatively new to Humboldt County, emerging about 10-15 years ago. Latino communities are primarily located in McKinleyville, Fortuna, and Rio Dell. Outreach to the Latino population is challenging due to a lack of culturally competent social workers.
- Hmong: The Hmong population is located primarily in Eureka. This community has experienced a retraction in population size due to welfare reform.
- Isolated Communities: Self-isolated communities in southern Humboldt County were identified as hard to reach.

C. Literature Reviews

The Literature Review conducted for this project revealed a wide range of cultural practices and beliefs among the hard to reach populations in California. Following is an overview of the common themes, characteristics, and beliefs found for all hard to reach communities.

Common Attributes and Beliefs

- **Depression and anxiety are common.** Mental health problems – particularly depression and anxiety – were noted in almost all linguistically isolated groups. Immigration places unique stresses on people: refugees face the permanent loss of their home country, while college-educated immigrants who voluntarily immigrate often take lower level jobs in the U.S. because of language barriers (Aroian, 1998; Redburn, 1998; Min, 1995).
- **Working conditions are poor.** Because of limited or no English skills, immigrants often must take the worst jobs. For instance, Mixteco farm workers are exposed to pesticides and heavy work, and follow the harvest between Washington state and California (Holmes, 2006). Asian immigrants have a high percentage of work-related deaths, including homicide (Kandula 2004).
- **Cultural diversity can be present within speakers of the same language.** Arabic speakers, for instance, may be united by their common language, but are diverse (Haddad, 2004). Arabic speakers may practice different forms of Islam (Sunni, Shi'a) or belong to different Christian sects. Arabic dialects make it difficult for North Africans to understand those from the Arabian Peninsula. Use of different words and slang, as well as a diversity of religious practices, may also be present among Spanish speakers who emigrate from countries throughout Central and South America. Finally, Russian speakers come from different countries, such as Belarus, Ukraine, and Russia. This diversity is evidenced in different usage of medical care services (Ivanov, 2002).
- **Ambivalence about assimilation affects how children are raised.** Several examples include Armenians, who encourage their children to excel in school but worry about a university setting where young adults are exposed to a predominately non-Armenian culture (O'Grady (1981). Many Southeast Asians are mistrustful of outsiders and attempt to protect their children from unsatisfactory role models that Westerners might introduce (Morrow, 1989).
- **Use of government services is less likely among the undocumented.** The perception that the medical care system is somehow linked to immigration services was a powerful cause of anxiety for immigrants from Mexico and China (Kandula 2004; Berk, 2001), and is likely to be a concern among other immigrant groups with no documentation. However, WIC appears to be a trusted government provider (McGuire, 2006).
- **Men often play an important role in family life and decision-making.** For many hard to reach groups, the family is the fundamental social unit, and the father is the head of the family (Sharareh, 2007; Cullar 1995). This means that husbands sometimes attend their wives' medical appointments, and make important decisions regarding medical care and treatment for their children.

D. Media Analysis

Media analysis findings for this project include a data spreadsheet of in-language media outlets that are accessible by hard to reach populations, as well as the languages and counties where media is not available. This section also provides additional research on ethnic media usage in the United States, Web site visitation data for ethnic groups, and information technology usage in California.

Data Spreadsheet of Media Outlets

A spreadsheet containing media outlet research for the hard to reach populations was created according to the methodology explained in Section 2 of this report. While the majority of hard to reach communities have at least one in-language media outlet available to them, there are some languages or language groups that do not, including:

- African languages
- French
- Gujarathi
- Hebrew
- Indo-European languages
- Laotian

For the other language groups, it was found that media outlet options and availability vary by county throughout the state. For example, in-language Korean television, print, and radio are found in the Los Angeles DMA, while Imperial County does not list a single outlet.

Separate data tabs were created to show the media outlets for Spanish, American Indian, and indigenous Mexican communities. The Spanish-language media spreadsheet shows the television, radio, and print outlets per DMA, and the American Indian and indigenous Mexican spreadsheets show only counties where any media outlet was found. (See Attachment D for the complete data sheet of media outlets.)

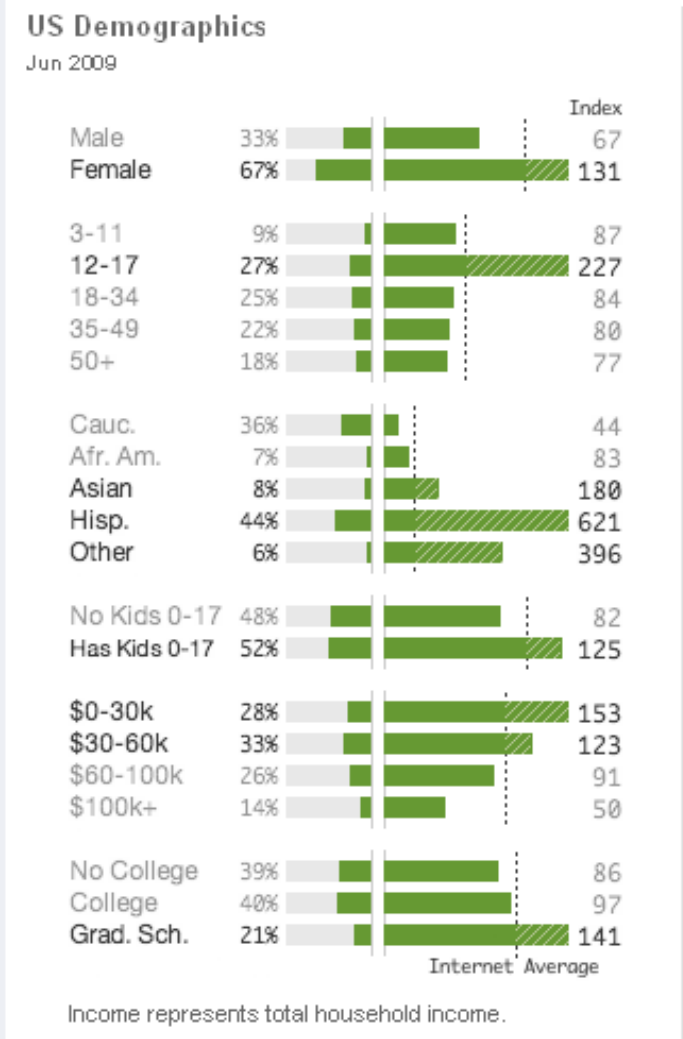
Note: The accessibility of online and satellite media outlets was not included in research for this project. In some cases, an international or national media outlet for a hard to reach population may be listed because that outlet may have a California office or report on local issues in the county where it is listed.

Web site Traffic Data

Research on the First 5 California Web site www.ccfc.ca.gov, was conducted to show the demographics of visitors to the site. The following are the user traffic percentages and index numbers compared to their population for ethnic groups for which data is collected.

Ethnic Group	% of Users	Index
Caucasian	36%	44
African American	7%	83
Asian	8%	180
Latino	44%	621
Other	6%	396

Figure 4: U.S. Traffic Demographic Data to www.first5california.com



With index numbers of 621 and 180 respectively, Latino and Asians exhibit strong usage of the First 5 California Web site. (An index of over 100 means that population has a high number of visitors compared to their total population in the state.) Because of this, an additional dataset was obtained from Nielsen to provide the following information on Web sites that rank highest for Latino and Asian traffic:

- Composition percentage
- Index numbers
- Reach and coverage for females with children prenatal to age five in Latino or Asian households.

The spreadsheet containing the Nielsen Web site listings is provided in Attachment F.

Ethnic Media Usage in the United States

New America Media released a report titled *A National Study on the Penetration of Ethnic Media in America* in June 2009.[9] This report provided results from a poll on the significant growth of the ethnic media sector and ethnic media's readership in the United States. While this was a national study, there are several findings from this report regarding media consumption patterns among ethnic minorities that may help better inform First 5 California about reaching these populations locally. Following are the key points gleaned from the report:

- 45% of all African American, Latino, Asian American, American Indian, and Arab American adults prefer ethnic television, radio, or newspapers to their mainstream counterparts.
- More than half of all Latino adults are primary consumers of ethnic media. Approximately two-fifths of African Americans and Arab Americans and a fourth of Asian Americans and American Indians prefer ethnic media to mainstream media.
- The reach of Spanish-language media is almost universal among Latino Americans. 87% of all Latino adults access Spanish-language television, radio, or newspapers on a regular basis.
- More than a quarter (29%) of Latino adults report that they now prefer Spanish-language newspapers to their English-language counterparts.
- Approximately 80% of all Korean, Chinese, and Vietnamese adults read an ethnic newspaper on a regular basis. More than half of Asian Indian, Filipino, and Japanese adults read an ethnic newspaper a few times a month or more.
- Korean and Chinese television stations are rapidly increasing in popularity. A quarter (25%) of the Koreans and Chinese interviewed reported watching Korean- and Chinese-language television more often than English-language television.
- Arabic media reaches three-quarters of all Arab Americans. Television is the preferred medium.
- Nearly a quarter (23%) of all American Indians are primary consumers of ethnic newspapers. They read tribal newspapers more often than their mainstream counterparts. American Indian television and radio stations have much smaller audiences. About one-sixth (16%) of American Indian adults access Web sites with a focus on American Indian issues.
- The survey finds that while the ethnic populations studied tend to rely on the ethnic media for information about their communities and countries of origin, when it comes to information about politics and the U. S. government, most turn to the mainstream media.

[9] An Executive Summary of the study is provided in Attachment F.

E. Supplemental Research

Information Technology Usage

The Public Policy Institute of California (PPIC) released findings from its statewide survey, *Californians and Information Technology*,[10] in June 2009. This survey gathered data on the access and use of information technology, including computer ownership, home Internet and broadband connections, and overall use of computers and the Internet. It also explores the prevalence of cell phone use and texting. All survey respondents were adults and represented a range of demographic groups, including race, ethnicity, income, urban, rural, and geographic location in the state of California. Following are insights from the survey that are relevant for this research report:

- **Ethnic digital divide:** While Latinos increased their Internet use (53% today, 48% in 2008), the growth among Caucasians was greater (88% today, 81% in 2008). Caucasians' computer use (89% today, 85% in 2008) increased by about the same amount as Latinos' (61% today, 58% in 2008). Latinos today are less likely to use computers and the Internet than Asians (87% computers, 85% Internet) and African Americans (89% computers, 81% Internet). Latinos are more likely than Caucasians to access the Internet with a handheld device or at the library (25% to 18%).
- **Income/Rural/Urban digital divide:** Lower-income residents are far less likely to have computer and Internet access at home, while nearly all adults with a household income over $80,000 have access. Still, the digital divide between lower- and upper-income residents has narrowed somewhat since 2008. Differences exist across regions, but the urban/rural divide has closed for computer ownership (2008: 65% rural, 73% urban) and Internet connectivity (2008: 58% rural, 63% urban), and narrowed for broadband adoption (2008: 51% rural, 56% urban).
- **Ethnic social networking:** African Americans are more likely (53%) than others (44% Asians, 39% Caucasians, 28% Latinos) to use a social networking site. Asians are most likely (22%) to blog (14% Caucasians, 13% African Americans, 11% Latinos).
- **General population social networking:** California's Internet users (49%) report going online to use a social networking site. California Internet users are more likely than those nationwide to use Twitter (24% to 11%).
- **Home computer ownership:** Over half of Latinos (52%) report having a computer at home compared with at least three in four Asians (89%), Caucasians (87%), and African Americans (75%).
- **General population Internet connection:** 62% of California adults have a broadband Internet connection at home, including 28% with DSL, 20% cable modem, 11% wireless, and 3% fiber optic or T-1; just 5% have dial-up.
- **Ethnic cell phone use and texting:** Latinos are less likely than Caucasians to have cell phones (74% to 90%) but more likely to use them for texting (68% to 62%). The texting gap was nine percentage points in 2008 (63% Latinos, 54% Caucasians).

[10] The PPIC study is provided in Attachment F.

Grassroots Communication Database

Research was conducted to identify community-based, faith-based, and other organizations that provide culturally competent services and resources to the ACS language groups, as well as American Indian and Indigenous Mexican communities. While linguistically or culturally isolated Spanish-speaking communities are recognized by First 5 California as an important population, the additional grassroots outreach research focused only on the other language groups. There are a multitude of organizations that serve Spanish-speaking immigrants, and there are several existing studies on how to communicate with this population. In an effort to focus the scope of this project, dominantly Spanish-speaking groups were not included in this portion of the research.

A grassroots organization database was created to serve as a starting point for First 5 California to continuously develop a master database of organizations that could be used for disseminating First 5 materials to hard to reach populations. Following are the types of organizations included in the database:

- Community Centers
- Ethnic/Cultural Associations
- Family Resource Centers
- Religious Centers
- Immigrant and Refugee Centers
- Women's Shelters
- Health Care Centers/Referral Networks
- Advocacy Programs

The complete grassroots outreach database is provided in Attachment E.

4. COMMUNICATION RECOMMENDATIONS

Opportunities and Lessons for Communication Strategies

The research and data analysis included in this study provides several insights for effectively reaching and communicating with hard to reach populations in California. Overall, it is evident that messages and outreach strategies are most effective when they are targeted and tailored to the unique cultural attributes of each hard to reach community. Following is a summary of some overarching recommendations for communicating with culturally or linguistically isolated groups.

- **Non-English television channels and Web sites.** Some immigrant groups have extensive and technologically sophisticated communications channels, such as subscription television channels through satellite or cable companies. (Vietnamese, Persian, Russian, Hindi). Web sites are another medium that is increasing in popularity and usage among almost all hard to reach communities, especially those in urban areas.
- **Radio shows are popular with immigrants from rural areas.** Radio shows in Hmong, Cambodian, and Mixteco, among others, keep the community updated on issues (Archibold, 2009). Local hosts cover relevant issues, play familiar music, and sometimes announce social services.
- **Using a church or temple as a communication channel may be effective with some groups, and less effective with others.** Secular Jews immigrating from Israel and Muslim Persian speakers from Iran are two examples of immigrant groups that may be ambivalent about their religious heritage (Gold, 1994; Mobasher, 2006). Therefore, communicating through religious organizations should be carefully considered for each group. In the case of recent Russian immigrants, many belong to a fundamentalist Christian church (Delgado 1994), and so the church may be a means to reach the majority of the community.
- **Grassroots outreach is an effective face-to-face communication strategy.** Outreach workers recruited from the hard to reach group and trained for a particular task (e.g., farm worker safety) have been used successfully with Spanish speakers, Mixteco, and Zapotec speakers, and some Southeast Asian groups. Working with local community members has the advantage of communicating a message through people who already speak the language and are aware of cultural issues critical to effective communication.
- **Translation requires confirmation and testing.** Translation of health and other social service materials for print or mass media is needed, but care must be used in the translation process so that the meaning is fully understood in the target language (Ponce 2001).

5. ATTACHMENTS

The full attachment files for the following and are available electronically upon request.

A. Demographic Maps

B. Data Tables

C. Literature Reviews

D. Media Spreadsheet

E. Grassroots Outreach Database

F. References:

- California Designated Market Area (DMA) Map
- List of County Refugee Coordinators
- Nielsen Report on Web site Audiences
- New America Media. (2009, June). *Executive Summary of a National Study on the Penetration of Ethnic Media in America*. Retrieved July 23, 2009, from http://media.namx.org/polls/2009/06/Penetration_of_Ethnic_Media_Executive_Summary.pdf
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